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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/963,360 | 09/24/2001 | Gerald J. Ware | WAR1394.07A | 8250 |
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| JOHN P. O'BANION O'BANION & RITCHEY LLP 400 CAPITOL MALL SUITE 1550 SACRAMENTO, CA 95814 | | | EXAMINER BECKER, DREW E | |
| | | | ART UNIT 1761 | PAPER NUMBER |

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,360

Applicant(s)

WARE, GERALD J.

Examiner

Drew E. Becker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-33,35-39,59-61 and 69-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-33,35-39,59-61 and 69-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawing were received on January 20, 2006. This drawing is accepted.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 72 and 74-75 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 72 recites the limitation "a second drying zone". It is not clear whether this the same "second drying zone" of parent claim 31
5. Claim 74 recites "said drying zones". It is not clear which "zones" are being referred to.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 31-33, 38-39, 59-61, 69-70, 73-74, and 77-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oates et al [Pat. No. 3,214,844] in view of Lockwood [Pat. No. 4,334,366].

Oates et al teach a drying apparatus comprising a housing with three zones (Figure 1, #10, 22, 24, 26), support substrates on a conveyor (Figure 3, #58), first and second heat sources (Figure 2, #30), means for recycling heated gas (Figure 2), the gas being air which inherently includes nitrogen, and an end sprocket which flips the support substrates and separates the food from them (Figure 1, #60). Phrases such as "at a rate of between..." are merely preferred methods of using the claimed apparatus. Oates et al do not recite an ultrasound source. Lockwood teaches a drying apparatus comprising an ultrasound source (column 5, line 60 to column 6, line 18). It would have been obvious to one of ordinary skill in the art to incorporate the ultrasound source of Lockwood et al into the invention of Oates et al since both are directed to drying devices, since Oates et al already included hot gas burners to heat the air (Figure 2, #30), and since Lockwood teaches that combination of pulsating hot gas and sonic energy provided superior drying performance as compared to conventional hot gas burners (column 8, line 23; column 5, line 60 to column 6, line 18).

8. Claims 31-33, 38-39, 59-61, 69-74, and 76-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott [Pat. No. 4,419,834] in view of Lockwood.

Scott teaches a drying apparatus comprising a housing with three compartments (Figure 1, #26, 28, 30), support substrates in the form of vanes (Figure 2a, #64), a

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conveyor (Figure 1, #32), first and second heat sources in the form of heat exchange coils or gas burners (Figure 2, #48; column 3, lines 30-56), means for recycling heated gas (Figure 2), the gas being air which inherently includes nitrogen, means for separating the food from the substrates (Figure 1, #72), and the second compartment having two zones which share recycled air (Figure 1, #28). Phrases such as "at a rate of between..." are merely preferred methods of using the claimed apparatus. Oates et al do not recite an ultrasound source. Lockwood teaches a drying apparatus comprising an ultrasound source (column 5, line 60 to column 6, line 18). It would have been obvious to one of ordinary skill in the art to incorporate the ultrasound source of Lockwood et al into the invention of Scott since both are directed to drying devices, since Scott already included hot gas burners to heat the air (Figure 2, #48), and since Lockwood teaches that combination of pulsating hot gas and sonic energy provided superior drying performance as compared to conventional hot gas burners (column 8, line 23; column 5, line 60 to column 6, line 18).

9. Claims 35-36 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott, in view of Lockwood, as applied above, and further in view of Ware [Pat. No. 5,522,156].

Scott and Lockwood teach the above mentioned components. Scott also teaches vanes (Figure 2a, #64). Oates et al and Lockwood do not recite a plurality of spheres. Ware teaches a drying device using a plurality of spheres (abstract). It would have been obvious to one of ordinary skill in the art to incorporate the plurality of spheres of Ware into the invention of Scott, in view of Lockwood, since all are directed to drying devices,

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since Scott already included vanes capable of holding the spheres (Figure 2a, #64), and since Ware teaches that it is old to employ a plurality of spheres to form a drying bed which provides for even application of particulate food products to be dried over the drying bed, thereby facilitating faster drying of the products (column 1, lines 12-27).

10. Claims 35, 37, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oates et al, in view of Lockwood, as applied above, and further in view of Ware [Pat. No. 5,522,156].

Oates et al and Lockwood teach the above mentioned components. Oates et al also teach a container (Figure 3, #58). Oates et al and Lockwood do not recite a plurality of spheres. Ware teaches a drying device using a plurality of spheres (abstract). It would have been obvious to one of ordinary skill in the art to incorporate the plurality of spheres of Ware into the invention of Scott, in view of Lockwood, since all are directed to drying devices, since Scott already included a container capable of holding the spheres (Figure 3, #58), and since Ware teaches that it is old to employ a plurality of spheres to form a drying bed which provides for even application of particulate food products to be dried over the drying bed, thereby facilitating faster drying of the products (column 1, lines 12-27).

11. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oates et al, in view of Lockwood, as applied above, and further in view of Geromini et al [Pat. No. 5,911,488].

Oates et al and Lockwood teach the above mentioned components. Oates et al and Lockwood do not recite a vibrating perforated table. Geromini et al teach a drying device

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comprising a vibrating perforated table (column 2, line 62). It would have been obvious to one of ordinary skill in the art to incorporate the vibrating table of Geromini et al into the invention of Oates et al, in view of Lockwood, since all are directed to drying devices, since Oates et al likely would have required some means to ensure that the cereal was completely emptied from the containers (Figure 1, #58), and since the vibrating table of Geromini et al would have helped ensure even heating and easy removal of all the cereal grains of Oates et al by preventing them from becoming stuck, or stationary, within the containers (Figure 1, #58).

Response to Arguments

12. Applicant's arguments filed January 20, 2006 have been fully considered but they are not persuasive.

Applicant argues that Oates et al did not include a "support substrate". However, Oates et al clearly illustrate a support substrate in the form of a bin (Figure 3, #58).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., spheres) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Lockwood could not be used for drying foods. However, the express purpose of Lockwood was for the drying of foods (column 2, line 35).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Oates et al is directed to a continuous device for drying foods, while Lockwood is directed to a continuous device for drying foods with the additional help of ultrasonic energy. It would have been obvious to one of ordinary skill in the art to incorporate the ultrasound source of Lockwood et al into the invention of Oates et al since both are directed to food drying devices, since Oates et al already included hot gas burners to heat the air (Figure 2, #30), and since Lockwood teaches that combination of pulsating hot gas and sonic energy provided superior drying performance as compared to conventional hot gas burners (column 8, line 23; column 5, line 60 to column 6, line 18).

In response to applicant's argument that the sonic means of Lockwood could not be used with Oates et al, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

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In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that the air flow of Oates et al was too low, and the airflow of Lockwood was too high. However, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicant argues that Lockwood does not teach an ultrasound source. However, Lockwood uses the terms ultrasonic energy and sonic drying interchangeably as shown in column 1, lines 39-55. Furthermore, Lockwood describes the frequency as being "several thousand cycles per second" (column 5, line 65). Ultrasonic waves were conventionally considered to be on the order of 20,000 cycles/sec. Therefore, Lockwood clearly teaches an ultrasonic source.

Applicant argues that the air of Oates et al would not satisfy claim 73. However, claim 73 required only that the gas "comprises nitrogen". Thus, air satisfies the claim limitation.

Applicant argues that Scott does not teach a conveyor, particulate support, or ultrasound. However, the cited references teach all of these limitations. Scott clearly

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teaches support substrates in the form of vanes (Figure 2a, #64) and a conveyor (Figure 1, #32). Lockwood teaches the ultrasound source as described above.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Scott is directed to a continuous device for drying foods, while Lockwood is directed to a continuous device for drying foods with the additional help of ultrasonic energy. It would have been obvious to one of ordinary skill in the art to incorporate the ultrasound source of Lockwood et al into the invention of Scott since both are directed to drying devices, since Scott already included hot gas burners to heat the air (Figure 2, #48), and since Lockwood teaches that combination of pulsating hot gas and sonic energy provided superior drying performance as compared to conventional hot gas burners (column 8, line 23; column 5, line 60 to column 6, line 18).

In response to applicant's argument that the sonic means of Lockwood could not be used with Scott, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would

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have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that spheres could not be used in the devices of Oates et al and Scott. However, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Regardless, the bins of Oates et al (Figure 3, #58) and the vanes of Scott (Figure 2a, #64) were certainly capable of holding spheres since both device were intended for holding particulate food materials.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

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(i.e., a conveyor **belt**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew E. Becker whose telephone number is 571-272-1396. The examiner can normally be reached on Mon.-Fri. 8am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew Becker
DREW BECKER
PRIMARY EXAMINER
3-21-06